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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

LIN, KENNY S

ART UNIT	PAPER NUMBER
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2152

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/873,183	SIMPSON ET AL.	
	Examiner	Art Unit	
	Kenny Lin	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 13-20 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13-20 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7, 13-20 and 23 are presented for examination. Claims 8-12 and 21-22 are canceled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/22/2007 has been entered.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 23 is rejected under 35 U.S.C. 101 because claim 23 is directed to **computer-readable medium**. This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful, concrete and tangible result. A computer-readable medium such as carrier wave or optical wave is not tangible since such computer transport medium does not fall into the categories of “process”, “machine”, “manufacture” and “composition of matter”. As such, the claim is not limited to statutory subject matter and is therefore non-statutory. See MPEP § 2106.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krum, US 6,618,742, in view of Kovnat et al (Hereinafter Kovnat), US 5,619,649.

7. Krum and Kovnat were cited in the previous office action.

8. As per claim 23, Krum taught the invention substantially as claimed including a method for controlling tasks in a multi-tasking network, comprising:

- a. Receiving a job ticket at a job ticket service (abstract, col.2, lines 44-52, col.4, lines 41-54, 61-64, col.5, lines 29-34) having job ticket reference (col.5, lines 50-59: indication of the job);
- b. Controlling access to original job tickets by the job ticket service where a job ticket is configured to define a job to be performed (abstract, col.2, lines 44-52, col.4, lines 40-54, 58-67, col.5, lines 1-3, 20-26, 50-59);
- c. Assign the different tasks from a single original job ticket to different task processors (col.4, lines 58-67, col.5, lines 1-3, 38-47) by distributing a ticket copy of the single original job ticket and distributing a job ticket reference to each task

processor that identifies the single original job ticket and the job ticket service (col.5, lines 50-59: indication of the job);

- d. Receiving status updates from the selected processors relating to an assigned task that are identified by the job ticket reference (col.5, lines 47-61: retrieves statistical information on the execution of jobs from the farm system and then updates the job statistics database; update status component... provides update information on the progress of the jobs); and
- e. Updating the original job ticket associated with the job ticket reference based on the status update, such that the job ticket service controls modification of the original job ticket (col.5, lines 47-61: retrieves statistical information on the execution of jobs from the farm system and then updates the job statistics database; update status component... provides update information on the progress of the jobs).

9. Krum did not specifically teach to create a reference to the job ticket service; to store the job ticket reference; and to distribute a ticket copy of the single original job ticket and where the selected task processors can include an external service provider. Kovnat taught to comprise a reference that correlates the original job ticket to the job ticket service (col.9, lines 22-26); storing a job reference that is associated with the original job ticket (col.16, lines 9-15, 31-54); and to distribute a ticket copy of the single original job ticket to selected task processors where the task processors can include an external service provider (col.17, lines 12-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the

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teaching of Krum and Kovnat because Kovnat's teaching of distributing copy of ticket to remote processors enables Krum's apparatus to send the job ticket to a remote processor's queue for processing. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Krum and Kovnat because Kovnat's teaching of using reference to correlates the job ticket service enables Krum's apparatus to pinpoint a particular service of a particular job.

10. Claims 1-4, 6-7 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krum, US 6,618,742, in view of Kovnat et al (Hereinafter Kovnat), US 5,619,649, and Fertlitsch et al (Fertlitsch), US 2002/0089691.

11. As per claim 1, Krum taught the invention substantially as claimed including an apparatus that controls tasks in a multi-tasking computer network, comprising:

- a. A job ticket service, being configured to:
 - i. Function as a centralized service for controlling access to original job tickets where a job ticket is configured to define a job to be performed and (abstract, col.2, lines 44-52, col.4, lines 40-54, 58-67, col.5, lines 1-3, 20-26, 50-59) includes a job ticket reference (col.5, lines 50-59: indication of the job);
 - ii. Receiving status updates from task processors that are responsible for performing a task from an original job ticket where the task is associated to the job ticket reference (col.5, lines 47-61: retrieves statistical

information on the execution of jobs from the farm system and then updates the job statistics database; update status component... provides update information on the progress of the jobs); and

- iii. Update the original job ticket associated with the job ticket reference based on the status update, such that the job ticket service controls modification of the original job ticket (col.5, lines 47-61: retrieves statistical information on the execution of jobs from the farm system and then updates the job statistics database; update status component... provides update information on the progress of the jobs); and
- iv. a work flow controller (e.g. distribute jobs components) configured to assign the job from a single original job ticket to selected task processor (col.4, lines 58-67, col.5, lines 1-3, 38-47) by distributing a job ticket reference to each task processor that identifies the single original job ticket and the job ticket service (col.5, lines 50-59: indication of the job).

12. Krum did not specifically teach that the job includes a plurality of tasks and to separately assign the tasks from a single original job ticket to selected task processor and to distribute a ticket copy of the single original job ticket and where the selected task processors can include an external service provider. Kovnat taught to comprise a job reference that associates the original job ticket (col.16, lines 9-15, 31-54) and to distribute a ticket copy of the single original job ticket to selected task processors where the task processors can include an external service provider (col.17, lines 12-17). It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to combine the teaching of Krum and Kovnat because Kovnat's teaching of distributing copy of ticket to remote processors enables Krum's apparatus to send the job ticket to a remote processor's queue for processing. Krum and Kovnat did not specifically teach the job includes a plurality of tasks and to separately assign the tasks from a single original job ticket to selected task processor. Fertlitsch taught to include a plurality of tasks in a job and to control work flow using cluster printing method to distribute the tasks to different processors for handling (pp. 0008, 0041, 0096, 0111). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Krum, Kovnat and Fertlitsch because Fertlitsch's teaching of cluster processors method enables Krum and Kovnat's task distribution method to distribute tasks of a job to multiple processors by splitting tasks of a job in order to load-balance the processors.

13. As per claim 13, Krum taught the invention substantially as claimed including a method for controlling tasks in a multi-tasking network, comprising:

- a. Receiving a job ticket at a job ticket service (abstract, col.2, lines 44-52, col.4, lines 41-54, 61-64, col.5, lines 29-34) having job ticket reference (col.5, lines 50-59: indication of the job);
- b. Controlling access to original job tickets by the job ticket service where a job ticket is configured to define a job to be performed (abstract, col.2, lines 44-52, col.4, lines 40-54, 58-67, col.5, lines 1-3, 20-26, 50-59);
- c. assign the job from a single original job ticket to selected task processors (col.4, lines 58-67, col.5, lines 1-3, 38-47) by distributing a ticket copy of the single

original job ticket and distributing a job ticket reference to each task processor that identifies the single original job ticket and the job ticket service (col.5, lines 50-59: indication of the job);

- d. Receiving status updates from the selected processors relating to an assigned task that are identified by the job ticket reference (col.5, lines 47-61: retrieves statistical information on the execution of jobs from the farm system and then updates the job statistics database; update status component... provides update information on the progress of the jobs); and
- e. Updating the original job ticket associated with the job ticket reference based on the status update, such that the job ticket service controls modification of the original job ticket (col.5, lines 47-61: retrieves statistical information on the execution of jobs from the farm system and then updates the job statistics database; update status component... provides update information on the progress of the jobs).

14. Krum did not specifically teach that the job includes a plurality of tasks and to separately assign the tasks from a single original job ticket to selected task processor, to create a reference to the job ticket service; to store the job ticket reference; and to distribute a ticket copy of the single original job ticket and where the selected task processors can include an external service provider. Kovnat taught to comprise a reference that correlates the original job ticket to the job ticket service (col.9, lines 22-26); storing a job reference that is associated with the original job ticket (col.16, lines 9-15, 31-54); and to distribute a ticket copy of the single original job ticket to

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selected task processors where the task processors can include an external service provider (col.17, lines 12-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Krum and Kovnat because Kovnat's teaching of distributing copy of ticket to remote processors enables Krum's apparatus to send the job ticket to a remote processor's queue for processing. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Krum and Kovnat because Kovnat's teaching of using reference to correlates the job ticket service enables Krum's apparatus to pinpoint a particular service of a particular job. Krum and Kovnat did not specifically teach the job includes a plurality of tasks and to separately assign the tasks from a single original job ticket to selected task processor. Fertlitsch taught to include a plurality of tasks in a job and to control work flow using cluster printing method to distribute the tasks to different processors for handling (pp. 0008, 0041, 0096, 0111). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Krum, Kovnat and Fertlitsch because Fertlitsch's teaching of cluster processors method enables Krum and Kovnat's task distribution method to distribute tasks of a job to multiple processors by splitting tasks of a job in order to load-balance the processors.

15. As per claim 2, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 1. Krum further taught the apparatus to comprise: a job ticket storage for maintaining the original job tickets (col.5, line 22, lines 34-36: job database).

16. As per claim 3, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 2. Krum further taught that the job ticket service is configured to allow the selected task processors to access the original job tickets using the job ticket reference (col.5, lines 56-59).

17. As per claim 4, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 1. Kovnat further taught that the job ticket service limits access to the job ticket to a portion of the job ticket (col.16, lines 47-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Krum and Kovnat because Kovnat's teaching of limiting access to portion of the original job ticket enforce Krum's apparatus to provide a secure and managed processing method for processing the tasks.

18. As per claim 6, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 1. Kovnat further taught that a job ticket reference is configured to be passed between multiple task processors to allow access to at least a portion of a corresponding original job ticket (fig.1, 18, 20, fig.15, 400, 402, 404; col.16, lines 45-55, 65-66; from 404 to 400). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Krum and Kovnat because Kovnat's teaching of passing job ticket reference between multiple task processors enables Krum's apparatus to allow multiple task processors to process the tasks of the original job ticket.

19. As per claim 7, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 1. Kovnat further taught to comprise a job store that stores job content (fig.15, 417;

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col.15, lines 44-49), and wherein an original job ticket comprises: a service identification that correlates the original job ticket to the job ticket service (col.9, lines 22-26); a job identification that correlates the original job ticket to the job content (col.16, lines 9-15, 31-54); and a control module that includes parameters that define processes required to complete a task (col.16, lines 55-67, col.17, lines 1-4, 12-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Krum and Kovnat because Kovnat's teaching of using service identification enables Krum's apparatus to pinpoint a particular service of a particular job.

20. As per claim 14, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 13. Kovnat further taught to comprise: providing the job ticket reference to a processor in the network (col.16, lines 9-15, 31-54, col.17, lines 12-17); and providing the processor with access to the job ticket based on the job ticket reference (col.16, lines 9-15, 31-54, col.17, lines 12-17).

21. As per claim 15, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 14. Kovnat further taught that access to the job ticket is limited to a portion of the job ticket (col.16, lines 47-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Krum and Kovnat because Kovnat's teaching of limiting access to portion of the original job ticket enforce Krum's method to provide a secure and managed processing method for processing the tasks.

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22. As per claim 16, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 13. Kovnat further taught to comprise: receiving a job content corresponding to the job ticket (col.5, lines 14-16, col.17, lines 5-10); storing the job content in the network (col.10, lines 17-18, col.17, lines 5-10); and providing the processor access to the job content (col.16, lines 63-66, col.17, lines 3-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Krum and Kovnat because Kovnat's teaching of using service identification enables Krum's method to pinpoint a particular service of a particular job.

23. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krum, Kovnat and Fertlitsch as applied to claims 1-4, 6-7 and 13-16 above, and further in view of Thornton et al (hereinafter Thornton), US 2002/0078130.

24. Thornton was cited in the previous office action.

25. As per claim 5, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 1. Krum, Kovnat and Fertlitsch did not specifically taught that the job ticket service assigns the one or more tasks from the single original job ticket based on bids received from one or more task processors. Thornton taught to assign tasks based on bids received from the task processors (pp. 0062, 0064). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Krum, Kovnat, Fertlitsch and Thornton

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because Thornton's teaching of bidding for the tasks enables Krum, Kovnat and Fertlitsch's apparatus to selected a better and lower cost service.

26. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krum, Kovnat and Fertlitsch as applied to claims 1-4, 6-7 and 13-16 above, and further in view of Fertlitsch et al (Fertlitsch'989), US 2002/0113989.

27. Fertlitsch'989 was cited in the previous office action.

28. As per claim 17, Krum, Kovnat and Fertlitsch taught the invention substantially as claimed in claim 13. Krum, Kovnat and Fertlitsch did not specifically teach the further comprised limitations claimed in claim 17. Fertlitsch taught a method for controlling task to assign job tasks assigned according to processor capacity, availability, speed or other attributes (pp. 0039, 0057) and select one or more of the plurality of processors to process the job ticket (pp. 0039, 0057). It is obvious that the capability and availability information of each of the plurality of processors must first be obtained (e.g., received) in order to determine the assignment of processors in processing the jobs. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Krum, Kovnat, Fertlitsch and Fertlitsch'989 because Fertlitsch'989's teaching of assigning tasks according to the processor's ability enables Krum, Kovnat and Fertlitsch's method to speed up task processing by distributing the tasks to suitable processors (pp. 0038-0039).

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29. As per claim 20, Krum, Kovnat, Fertlitsch and Fertlitsch'989 taught the invention substantially as claimed in claim 17. Krum further taught that the selecting step is completed by an entity submitting the job ticket into the network (col.4, lines 49-51, col.5, lines 29-34).

30. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krum, Kovnat, Fertlitsch and Fertlitsch'989 as applied to claim 17 above, and further in view of Morales, Jr. et al (Morales), US 6,687,834.

31. Morales was cited in the previous office action.

32. As per claim 18, Krum, Kovnat, Fertlitsch and Fertlitsch'989 taught the invention substantially as claimed in claim 17. Krum further taught to monitor the progress of the job and provide update information (col.5, lines 59-61). Krum, Kovnat, Fertlitsch and Fertlitsch'989 did not specifically teach to comprise, when each processor of the selected one or more processors completes a process, receiving an update to information in the job ticket. Morales taught to include a work flow manager in managing the processes wherein when a process is completed, a report is being send to present the process result (col.3, lines 13-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Krum, Kovnat, Fertlitsch, Fertlitsch'989 and Morales because Morales' teaching of using a report to inform the result of the process enables the users of Krum, Kovnat, Fertlitsch and Fertlitsch'989's method to know when the process of the job is completed.

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33. As per claim 19, Krum, Kovnat, Fertlitsch and Fertlitsch'989 taught the invention substantially as claimed in claim 17. Krum, Kovnat, Fertlitsch and Fertlitsch'989 did not specifically teach that the selecting step is completed by a work flow controller in the network. Morales taught a work flower manager to manage the processes and select processor for processing (col.3, lines 13-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Krum, Kovnat, Fertlitsch, Fertlitsch'989 and Morales because Morales' teaching of using a work flow manager in managing the selection of processors enables Krum, Kovnat, Fertlitsch and Fertlitsch'989's method to select processors for processing when the processors are available.

Response to Arguments

34. Applicant's arguments with respect to 101 rejection have been fully considered but they are not persuasive. Applicant is suggested to amend the claims to further define that the computer readable medium is a storage-type medium such as a CD-ROM.

35. Applicant's arguments with respect to claims 1-7, 13-20 and 23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fertlitsch, US 2002/0089692

37. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
March 13, 2007

